

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for improving open loop power control in spread spectrum telecommunications systems, the method comprising the steps of:

transmitting at least one first access channel probe for a first message from a mobile station to a base station, the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level;

storing the first transmission power level at the mobile station; ~~and~~

transmitting at least one second access channel probe for a second message from the mobile station to the base station, the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level stored in the mobile station; and-

wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe.

2. (Original) The method as defined in claim 1, further comprising the step of:

storing a recently measured received code power from the base station at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured received code power.

3. (Original) The method as defined in claim 1, further comprising the step of:

storing a recently measured base station interference level at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured base station interference level.

4. (Original) The method as defined in claim 1, wherein the first message is a first packet and the second message is a second packet in a packet mode transmission.

5. (Original) The method as defined in claim 1, wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is based upon a path loss between the mobile station and the base station.

6. (Original) The method as defined in claim 5, wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is further based upon a base station interference level.

7. (Original) The method as defined in claim 1, wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message.

8. (Original) The method as defined in claim 1, wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message.

9. (Original) The method as defined in claim 1, wherein the transmission power level of the second message is at or slightly above a transmission power level that is required to have the second message reach the base station.

10. (Currently Amended) An apparatus for improving open loop power control in spread spectrum telecommunications systems, the apparatus comprising:

at least one memory for storing a first transmission power level of a specific access channel probe of at least one first access channel probe for a first message transmitted from a mobile station to a base station, the specific access channel probe of the at least one first access channel probe being the first access channel probe to receive an acknowledgment from the base station; ~~and~~

at least one processor for determining a second transmission power level of an initial access channel probe of at least one second access channel probe for a second message to be transmitted from the mobile station to the base station, the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being determined based upon first transmission power level stored in the at least one memory; and-

wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe.

11. (Original) The apparatus as defined in claim 10, wherein the memory also stores a recently measured received code power from the base station, the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured received code power.

12. (Original) The apparatus as defined in claim 10, wherein the memory also stores a recently measured base station interference level, the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured base station interference level.

13. (Original) The apparatus as defined in claim 10, wherein the first message is a first packet and the second message is a second packet in a packet mode transmission.

14. (Original) The apparatus as defined in claim 10, wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is based upon a path loss between the mobile station and the base station.

15. (Original) The apparatus as defined in claim 14, wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is further based upon a base station interference level.

16. (Original) The apparatus as defined in claim 10, wherein the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message.

17. (Original) The apparatus as defined in claim 10, wherein the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message.

18. (Original) The apparatus as defined in claim 10, wherein the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is at or slightly above a transmission power level that is required to have the initial access channel probe reach the base station.

19. (Currently Amended) An article of manufacture for improving open loop power control in spread spectrum telecommunications systems, the article of manufacture comprising:

at least one processor readable carrier; and

instructions carried on the at least one carrier; wherein the instructions are configured to be readable from the at least one carrier by at least one processor and thereby cause the at least one processor to operate so as to:

transmit at least one first access channel probe for a first message from a mobile station to a base station, the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level;

store the first transmission power level at the mobile station; and

transmit at least one second access channel probe for a second message from the mobile station to the base station, the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level stored in the mobile station; and-

wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe.

20. (Original) The article of manufacture as defined in claim 19, further causing the at least one processor to operate so as to:

store a recently measured received code power from the base station at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured received code power.

21. (Original) The article of manufacture as defined in claim 19, further causing the at least one processor to operate so as to:

store a recently measured base station interference level at the mobile station, the transmission power level of the initial access channel probe of the at least one second access

channel probe for the second message being further based upon the recently measured base station interference level.

22. (Original) The article of manufacture as defined in claim 19, wherein the first message is a first packet and the second message is a second packet in a packet mode transmission.

23. (Original) The article of manufacture as defined in claim 19, wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is based upon a path loss between the mobile station and the base station.

24. (Original) The article of manufacture as defined in claim 23, wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is further based upon a base station interference level.

25. (Original) The article of manufacture as defined in claim 19, wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message.

26. (Original) The article of manufacture as defined in claim 19, wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message.

27. (Original) The article of manufacture as defined in claim 19, wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is at or slightly above a transmission power level that is required to have the initial access channel probe reach the base station.